

BOOK REVIEWS

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THE KING OF THE ANTS

A New General Catalogue of the Ants of the World.—Barry Bolton. 1995. Harvard University Press, Cambridge, Massachusetts. 504 pages.

What can you say about such a volume? It is not a coffee-table book, such as Bolton's last volume, produced in similar oversized format by Harvard University Press (Bolton, 1994). But it adds up to something even more exciting: the holy triad of ants research. The two Bolton volumes and Hölldobler and Wilson (1990) mark indeed the culmination of ant research, do they not?

The Insect Societies, written almost twenty years ago by Ed Wilson (1971) has probably to be considered to be the real turning point in the study of ant behavior. It was the first modern synthesis and foundation of what followed, the masterly compilation by Hölldobler and Wilson (1990) in *The Ants*. That volume however has to be considered a *status quo* of an evolutionist's view of what was known in the early nineties in terms of ants, rather than a new approach in the field. At that time it was also of importance for its more than 600 included references, a number which has now to be compared with over 18,000 references included in *FORMIS*, available on the Internet today (Porter, 1996).

The *Identification Guide To The Ant Genera Of The World* (Bolton, 1994) is very attractive not only to the user, but to a wider audience, who enjoy scanning electron microphotographs of the weirdest creatures you can (almost) imagine. It is also the first comprehensive documentation of most of the extant ant genera published in one volume, an effort initiated with an eclectic collection ranging from cartoons to the most artistic drawings of ants by Hölldobler and Wilson (1990).

Finally, the *New Catalogue To The Ants Of The World* does not represent something sensually very attractive such as the identification guides or the color plates and the black and white illustrations in *The Ants*—but who likes a telephone directory for other than getting the right number, giving you access to whatever you always wanted to have? It is a unique piece of handicraft and patience. For that, more than 70 years had to pass since the last catalog of the ants of the world was finished by Emery. And who might have done such a master's job other than Barry Bolton?

Barry Bolton is for me the archetype of myrmecologist and taxonomist. As is typical for a myrmecologist, living ants play an integral part in your daily life, to such an extent that one's sweetheart has to accept colonies of ants in plaster nests among the stacks of freshly ironed shirts. As taxonomist, he represents the perfect civil servant, which once built up one of the cornerstones of the long lasting success of the Empire. He got his job to describe and curate ants at the British Museum (Natural History) in the early seventies, and he has done it in the most efficient way ever since.

One day, it was ten past ten in the morning at the tea table on the third floor in the entomology building, and after Barry finished complaining about the bad appearance of the English soccer team, he mentioned the sheer impossible, that one of the aims in his life is not to forget anything. On another occasion he mentioned casually that he gave up some years ago translating texts written in hieroglyphs into modern English for the British Museum at Bloomsbury. This just reminded me, that he has another major catalog sitting on his shelves—an unpublished dictionary of hieroglyphs. But that is only part of the story. He seems to know by heart all the scriptures of the extinct Middle Eastern languages.

This sense, almost obsession, of order, and a very deep love for ants must have driven him to complete the catalog of the world, despite a very stormy period along its way, i.e., the transformation of the British Museum (Natural History) into **The** Natural History Museum, coupled with confusing attempts to re-orient the research. Suddenly, the young elite researched the diversity of life by asking the old elite about intelligent guesses, about what is out there, thereby not bothering to touch any of the millions of specimens in the collection. Or the newly created Biodiversity Ambassador was trying to extract funds from conservation oriented money to improve the museum's financial situation, forcing people into saleable projects rather than those at which they were best—revisions at a global level. Barry kept working on the catalog, every day up to the last one until two hours before he left for home, and you should not have tried to get in touch with him during this time but the five 'smoking' minutes on the little stairs leading up to the roof on the *spirit building*. This disciplined working attitude was always his, even out in the jungle. During his time as participant in the Gunung Mulu expedition in 1977, he was outstanding two ways: in scrupulously examining every square chosen a few yards outside the base camp (i.e., destroying the whole thing completely), and to be the main sink of the rare beer stock, stimulating him to entertain the whole crowd out there in the bush by telling outrageous stories and singing bawdy songs later in the evenings (Hanbury-Tension, 1992). He must have felt very depressed, when he later learned that all the vials of ants collected in this project were crushed by a lorry on the way back to London.

It must have been the regular two pints of cider in the evening which helped him get through this monstrous task of cataloging all the 9,944 ant species (numbers are crunched in Bolton, 1995), not including subspecies, varieties and the wealth of infrasubspecific taxa, being unavailable names by nomenclatorial rules. If that itself seems to be a full time job, he added during this time most valuable numbers of new morphological characters in numerous revisions, which changed among other things the way the phylogeny of ants is seen now (for a complete list of his systematics papers see the references in the catalog itself). Finally, he seemed to be insatiable in reading literally tons of manuscripts every year and helping to identify ants, with greater pleasure the rarer they were, thus earning the high esteem of his colleagues.

Barry Bolton created his catalog. It is concise, complete and doubtless most reliable, giving all the necessary information if you deal only with the nomenclature of any of the species. One might have different views on such subjects however. In his fantastic effort to get even the most unusual references and with it the date of publication, he could have added at the same time more information that he came

across to the catalog, such as references to the biology or the distribution of the ants, even if it would have been only the name of the country. This would have expanded the book substantially, but who else gets the chance (and the personality) to do such a compilation again? Also, there is no index to the species and other taxa, and electronic publication and dissemination of the catalog as such, or as database are not available. One might argue that Barry Bolton and Harvard University Press sell the catalog at a (too) high price for a developing nation's scientist. I would have preferred this kind of information available on the Internet, especially because the whole catalog was paid for by the taxpayer anyway. No matter, for it is Barry Bolton who made the catalog, and he merits the highest recognition for it.

I am sure, that the age of the ants has finally been launched by this oeuvre. For the first time, ants will really be available for biodiversity and conservation studies: ants the rulers of global biodiversity, wrangled by the king of the ants, and explained by the lord of the ants, Ed Wilson.—*Donat Agosti, Dept. of Entomology, American Museum of Natural History, Central Park West at 79th St., New York, New York 10024.*

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The Tent Caterpillars.—Terrence D. Fitzgerald. 1995. Cornell University Press, Ithaca and London. 338 pages, 8 color photographs, 38 black and white photographs, 101 drawings. \$37.95 (cloth).

Consider the various aspects of lepidopteran biology that have drawn the fascination of scientists and layman alike: The sheer diversity of the group; its incredible array of life histories and hostplant associations; coevolutionary curiosities such as mimicry complexes; and, of course, their often charismatically showy coloration. Moth larvae have also been responsible for some of the most costly challenges facing foresters, farmers, orchardists, and horticulturalists. Indeed, the Lepidoptera are perhaps unique in having captured simultaneously the fancy of poets and the wrath of would-be pest control efforts. In this volume, the latest in the Cornell series in Arthropod Biology and the last to be edited by the late George C. Eickwort, T. D. Fitzgerald synthesizes a vast literature devoted to the biology of tent caterpillars